

# INVESTIGATOR'S ANNUAL REPORT

## National Park Service

All or some of the information provided may be available to the public

<b>Reporting Year:</b> 1992	<b>Park:</b> Shenandoah NP
<b>Principal Investigator:</b> Joseph S. Elkinton	<b>Office Phone:</b> 413-545-4816  <b>Email:</b> elkinton@ent.umass.edu
<b>Address:</b> Dept. of Entomology  Fernald Hall  University of MA Amherst, MA 01003 US	<b>Office Fax:</b> 413-545-5858
<b>Additional investigators or key field assistants (first name, last name, office phone, office email):</b> <b>Name:</b> Dr Ann Hajek <b>Phone:</b> n/a <b>Email:</b> n/a	
<b>Permit#:</b> SHEN1992AEEU	
<b>Park-assigned Study Id. #:</b> unknown	
<b>Project Title:</b> Release and spread of Entomophaga maimaiga to control gypsy moths	
<b>Permit Start Date:</b> Jan 01, 1998	<b>Permit Expiration Date</b> Jan 01, 1998
<b>Study Start Date:</b> Jan 01, 1991	<b>Study End Date</b> Jan 01, 1993
<b>Study Status:</b> Completed	
<b>Activity Type:</b> Other	
<b>Subject/Discipline:</b> Invertebrates (Insects, Other)	
<b>Objectives:</b> Monitor the spread of E. maimaiga released at locations in 1991 to determine if the fungus overwintered and the extent of its spread. In addition, we will quantify the percent of gypsy moth mortality which is resulting from E. maimaiga.	
<b>Findings and Status:</b> 1992 - Extensive mortality from E. maimaiga was found at all 14 sites with the lowest percent dying from fungus at 1 site (38%), and the other 13 sites ranging from 82% to 100%. At 2 release sites we also intensively collected along transects extending up to 1000m from the release spot and found 90 - 100% fungus mortality the entire distance. We speculate that the fungus has now naturally moved southward into Virginia i a massive epizootic, making it impossible to determine which mortality is the result of our earlier release. We sampled for fungus throughout the Park and at numerous locations in Virginia and found the fungus is now firmly established in Virginia, and causing impressive mortality on gypsy moth. No further introductions should be needed.	
<b>For this study, were one or more specimens collected and removed from the park but not destroyed during analyses?</b> No	
<b>Funding provided this reporting year by NPS:</b> 0	<b>Funding provided this reporting year by other sources:</b> 20000
<b>Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or college</b>	
<b>Full name of college or university:</b>	<b>Annual funding provided by NPS to university or college this reporting year:</b>

n/a	0
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